

Page 8, line 31 insert SEQ ID NO 014 before **CK19** and SEQ ID NO 020 before **EpCAM**

Page 9, line 7 insert SEQ ID NO 014 before **CK19**

Page 9, line 8 insert SEQ ID NO 014 before **CK19**

Page 9, line 17 insert SEQ ID NO 041 before **PSA** and SEQ ID NO 042 before **PSM** and SEQ ID NO 031 before **MGB1** and SEQ ID NO 032 before **MGB2** and SEQ ID NO 011 before **CK8** and SEQ ID NO 014 before **CK19** and SEQ ID NO 044 before **PIP** and SEQ ID NO 020 before **EpCAM**

Page 10, line 5 insert SEQ ID NO 002 before **Androgen Receptor (AR)** and SEQ ID NO 025 before **Hepsin (HPN)**

Page 10, line 6 insert SEQ ID NO 036 before **multidrug resistance (MDR1)**

Page 16, line 14 insert SEQ ID NO 031 before **mammoglobin 1 (MGB1)** and SEQ ID NO 032 before **mammoglobin 2 (MGB2)**

Page 16, line 15 insert SEQ ID NO 044 before **Prolactin inducible protein (PIP)** and SEQ ID NO 005 before **carcinoembryonic antigen (CEA)** and SEQ ID NO 041 before **prostate specific antigen (PSA)**

Page 16, line 16 insert SEQ ID NO 042 before **prostate specific membrane antigen (PSMA)** and SEQ ID NO 029 before **glandular kallikrein 2 (hK2)** and SEQ ID NO 002 before **androgen receptor (AR)**

Page 16, line 17 insert SEQ ID NO 025 before **Hespin (HPN)** and SEQ ID NO 016 before **DD3** and SEQ ID NO 038 before **Her-2/Neu** and SEQ ID NO 004 before **BCL2** and SEQ ID NO 019 before **epidermal growth factor receptor (EGFR)**

Page 16, line 18 insert SEQ ID NO 027 before **tyrosine kinase-type receptor (HER2)** and SEQ ID NO 054 before **thymidylate synthetase (TS)**

Page 16, line 19 insert SEQ ID NO 055 before **vascular endothelial growth factor (VEGF)** and SEQ ID NO 039 before **pancreatic mucin (Muc1)** and SEQ ID NO 024 before **guanylyl cyclase c (GC-C)**

Page 16, line 20 insert SEQ ID NO 040 before **phosphatidylinositol 3 kinase (PIK3CG)** and SEQ ID NO 045 before **protein kinase B gamma (AKT)** and SEQ ID NO 023 before **excision repair protein (ERCC1)**

Page 16, line 21 insert SEQ ID NO 001 before **alpha-1 globin (F6)** and SEQ ID NO 030 before **macrophage inhibitory cytokin-1 (G6)** and SEQ ID NO 018 before **dihydropyrimidin dehydrogenase (DPYD)**

Page 16, line 22 insert SEQ ID NO 054 before **insulin growth factor receptor (IGF2)** and SEQ ID NO 021 before **estrogen receptors alpha** and SEQ ID NO 022 before **estrogen receptors beta**

Page 16, line 23 insert SEQ ID NO 043 before **progesterone receptor (PR)** and SEQ ID NO 003 before **aromatase (cyp19)** and SEQ ID NO 048 before **Telomerase (TERT)**

Page 16, line 24 insert SEQ ID NO 014 before **cytokeratin 19 (CK19)** and SEQ ID NO 010 before **cytokeratin 5 (CK5)** and SEQ ID NO 011 before **cytokeratin 8 (CK8)** and SEQ ID NO 012 before **cytokeratin 10 (CK10)**

Page 16, line 25 insert SEQ ID NO 015 before **cytokeratin 20 (CK 20)** and SEQ ID NO 020 before **epithelial cell adhesion molecule (EpCAM)**

Page 16, line 26 insert SEQ ID NO 039 before **mucin 1 (MUC 1)** and SEQ ID NO 056 before **urokinase plasminogen activator (uPA)**

Page 16, line 27 insert SEQ ID NO 057 before **urokinase plasminogen activator receptor (uPAR)** and SEQ ID NO 033 and SEQ ID NO 034 before **matrix metalloproteinases (MMP)**

Page 16, line 28 insert SEQ ID NO 001 before **alpha-1-globin** and SEQ ID NO 006 before **CD 16** and SEQ ID NO 009 before **CD 45** and SEQ ID NO 007 before **CD 31**

Page 26, line 8 insert SEQ ID NO 058 before

5-TCTAGTCGACGGCCAGTGAATTGTAATACGACTCACTATAGGGCG(T)₂₁3

Page 27, line 10 insert SEQ ID NO 041 before **prostate specific antigen (PSA)** and SEQ ID NO 042 before **PSM** and SEQ ID NO 014 before **CK19** and SEQ ID NO 020 before **EpCAM**

Page 27, line 11 insert SEQ ID NO 002 before **AR** and SEQ ID NO 025 before **HPN** and SEQ ID NO 001 before **F6** and SEQ ID NO 031 and SEQ ID NO 032 before **mamoglobin**

Page 33, line 13 insert SEQ ID NO 006 before **cluster determinant 16** and SEQ ID NO 009 before **CD 45** and SEQ ID NO 007 before **CD 31**

Page 33, line 14 insert SEQ ID NO 030 before **macrophage inhibitory cytokine 1**

Page 33, line 15 insert SEQ ID NO 011 before **cytokeratin 8** and SEQ ID NO 013 before **cytokeratin 18** and SEQ ID NO 014 before **cytokeratin 19** and SEQ ID NO 020 before **epithelial cell adhesion molecule**

Page 33, line 16 insert SEQ ID NO 056 before **urokinase plasminogen activator**

Page 40, line 6 insert SEQ ID NO 041 before **prostate specific antigen** and SEQ ID NO 042 before **prostate specific membrane antigen** and SEQ ID NO 002 before **androgen receptor**

Page 40, line 7 insert SEQ ID NO 020 before **epithelial cell adhesion molecule**

Page 40, line 18 insert SEQ ID NO 041 before **PSA** and SEQ ID NO 042 before **PSM** and SEQ ID NO 002 before **AR** and SEQ ID NO 020 before **EpCAM**

Page 41, Table insert SEQ ID NO 041 before **PSA** and SEQ ID NO 042 before **PSM** and SEQ ID NO 002 before **AR** and SEQ ID NO 020 before **EpCAM** and SEQ ID NO 001 before **F6**

Page 42, line 20 insert SEQ ID NO 014 before **CK 19**

Page 42, line 21 insert SEQ ID NO 020 before **EpCAM**

Page 42, line 26 insert SEQ ID NO 001 before **alpha globin**

Page 44, line 10 insert SEQ ID NO 014 before **CK 19**

Page 44, line 11 insert SEQ ID NO 020 before **EpCAM**

Page 44, line 12 insert SEQ ID NO 014 before **CK 19**

Page 44, line 13 insert SEQ ID NO 020 before **EpCAM**

Page 44, line 15 insert SEQ ID NO 020 before **EpCAM**

Page 44, line 21 insert SEQ ID NO 014 before **CK 19** and SEQ ID NO 020 before **EpCAM**

Page 49, line 21 insert SEQ ID NO 014 before **CK 19**

Page 49, line 27 insert SEQ ID NO 014 before **CK 19**

Page 50, line 2 insert SEQ ID NO 014 before **CK 19**

Page 50, line 3 insert SEQ ID NO 014 before **CK 19**

Page 50, line 4 insert SEQ ID NO 014 before **CK 19**

Page 50, line 5 insert SEQ ID NO 014 before **CK 19**

Page 50, line 26 insert SEQ ID NO 059 before

5'-TCTAGTCGACGGCCAGTGAATT-3'

Page 51, Table I insert SEQ ID NO 001 before **alpha 1-globin**

Page 51, Table I insert SEQ ID NO 060 before **AAGACCTACTTCCCGCACTT**

Page 51, Table I insert SEQ ID NO 061 before **TATTTGGAGGTCAGCACGGT**

Page 51, Table I insert SEQ ID NO 002 before **AR**

Page 51, Table I insert SEQ ID NO 062 before

ATCTCTGTGCAAGTGCCCAAGAT

Page 51, Table I insert SEQ ID NO 063 before

CAGGAACATGTTTCATGACAGACTGT

Page 51, Table I insert SEQ ID NO 004 before **BCL2**

Page 51, Table I insert SEQ ID NO 064 before

GCAAGAGTGACAGTGGATTGCAT

Page 51, Table I insert SEQ ID NO 065 before

CTAATGGTGGCCAACTGGAGACT

Page 51, Table I insert SEQ ID NO 010 before **CK5**

Page 51, Table I insert SEQ ID NO 066 before

AGTCACTGCCTTCCAAGTGCAGCAA

Page 51, Table I insert SEQ ID NO 067 before

GGAAACCTGAAGGCTGATTTGAAGCAG

Page 51, Table I insert SEQ ID NO 011 before **CK8**

Page 51, Table I insert SEQ ID NO 068 before

GTGGTTTGAGCTCGGCCTATGG

Page 51, Table I insert SEQ ID NO 069 before **CCAGTGCTACCCTGCATAGCG**

Page 51, Table I insert SEQ ID NO 012 before **CK10**

Page 51, Table I insert SEQ ID NO 070 before

GACGGTAGAGTTCTTTCATCTACGGTTG

Page 51, Table I insert SEQ ID NO 071 before

GGAAACCACAAAACACCTTGTAGACACC

Page 51, Table I insert SEQ ID NO 013 before **CK18**

Page 51, Table I insert SEQ ID NO 072 before

ACCTTGAGTCAGAGCTGGCACAGA

Page 51, Table I insert SEQ ID NO 073 before

GCTTCTGCTGGCTTAATGCCTCAG

Page 52, Table I insert SEQ ID NO 014 before **CK19**

Page 52, Table I insert SEQ ID NO 074 before

CATATCCAGGCGCTGATCAGCG

Page 52, Table I insert SEQ ID NO 075 before

CAAAGGACAGCAGAAGCCCCAG

Page 52, Table I insert SEQ ID NO 016 before **DD3**

Page 52, Table I insert SEQ ID NO 076 before

GTAAGCCTGGGATGTGAAGCAAAGG

Page 52, Table I insert SEQ ID NO 077 before

GAACCCTAAAGTGGCTCACAAAGAGTG

Page 52, Table I insert SEQ ID NO 019 before **EGFR**

Page 52, Table I insert SEQ ID NO 078 before

CCTGTAACCTGACTGGTTAACAGCAG

Page 52, Table I insert SEQ ID NO 079 before

GGCTCTGACTGATCTGGGAGTCA

Page 52, Table I insert SEQ ID NO 020 before **EpCAM**

Page 52, Table I insert SEQ ID NO 080 before

GAGATGCATAGGGAACTCAATGC

Page 52, Table I insert SEQ ID NO 081 before

ACGATGGAGTCCAAGTTCTGGAT

Page 52, Table I insert SEQ ID NO 021 before **ER-a**

Page 52, Table I insert SEQ ID NO 082 before

AGCAGGTGCCTGAGACACAGA

Page 52, Table I insert SEQ ID NO 083 before

TCGAGCATCCCGCTGGATTCTT

Page 52, Table I insert SEQ ID NO 022 before **ER-b**

Page 52, Table I insert SEQ ID NO 084 before

GGAAGCTGGCTCACTTGCTGAA

Page 52, Table I insert SEQ ID NO 085 before

GAAGCACGTGGGCATTCAGCAT

Page 52, Table I insert SEQ ID NO 038 before **Her2Neu**

Page 52, Table I insert SEQ ID NO 086 before

TCGTTGGAAGAGGAACAGCACTG

Page 52, Table I insert SEQ ID NO 087 before

AGCCTGGATACTGACACCATTGC

Page 52, Table I insert SEQ ID NO 029 before **HK2**

Page 52, Table I insert SEQ ID NO 088 before **CACACCATGCAGGATGACAT**

Page 52, Table I insert SEQ ID NO 089 before **GCATTCCACAAGGTTCTCAG**

Page 52, Table I insert SEQ ID NO 036 before **MDR1**

Page 52, Table I insert SEQ ID NO 090 before

AGTGTCCAGGCTGGAACAAAG

Page 52, Table I insert SEQ ID NO 091 before

CTCCACTTGATGATGTCTCTCAC

Page 52, Table I insert SEQ ID NO 031 before **MGB1**

Page 52, Table I insert SEQ ID NO 092 before

CTCCCAGCACTGCTACGCAGGC

Page 52, Table I insert SEQ ID NO 093 before

GACATAAGAAAGAGAAGGTGTGGT

Page 52, Table I insert SEQ ID NO 032 before **MGB2**

Page 52, Table I insert SEQ ID NO 094 before

CTCCTCCTGCACTGCTATGCAGAT

Page 52, Table I insert SEQ ID NO 095 before

ACACCAAATGCTGTCGTACACTGTATGCA

Page 52, Table I insert SEQ ID NO 030 before **Mic1**

Page 52, Table I insert SEQ ID NO 096 before **CTACAATCCCATGGTGCTCA**

Page 52, Table I insert SEQ ID NO 097 before

ACACAGTTCCATCAGACCAGG

Page 52, Table I insert SEQ ID NO 033 before **MMP2**

Page 52, Table I insert SEQ ID NO 098 before

ACTGCTGGCTGCCTTAGAACCTT

Page 52, Table I insert SEQ ID NO 099 before

GAGAAGAGACTCGGTAGGGACAT

Page 52, Table I insert SEQ ID NO 034 before **MMP9**

Page 52, Table I insert SEQ ID NO 100 before

CGTCTTCCAGTACCGAGAGAAAG

Page 52, Table I insert SEQ ID NO 101 before

TGTATCCGGCAAACCTGGCTCCTT

Page 52, Table I insert SEQ ID NO 035 before **MRP**

Page 52, Table I insert SEQ ID NO 102 before

GGTGATCGTCTTGGACAAAGGAG

Page 52, Table I insert SEQ ID NO 103 before

TCTTCACAGCCAGTTCCAGGCAG

Page 52, Table I insert SEQ ID NO 039 before **MUC1**

Page 52, Table I insert SEQ ID NO 104 before

AACGGTGGCAGCAGCCTCTCTTA

Page 52, Table I insert SEQ ID NO 105 before

GCTTCCACACACTGAGAAGTGTCCG

Page 52, Table I insert SEQ ID NO 037 before **NKX3A**

Page 52, Table I insert SEQ ID NO 106 before

GGAAGTTCAGCCATCAGAAGTAC

Page 52, Table I insert SEQ ID NO 107 before **GGTATGGGTAGTAAGGATAG**

Page 52, Table I insert SEQ ID NO 047 before **p53**

Page 52, Table I insert SEQ ID NO 108 before

CTGCCTCAGCCTCCGGAGTAGCT

Page 52, Table I insert SEQ ID NO 109 before

GTGGGGTGAAAATGCAGATGTGC

Page 52, Table I insert SEQ ID NO 044 before PIP

Page 52, Table I insert SEQ ID NO 110 before

CAGAACTGTGCAAATTGCAGCCGTC

Page 52, Table I insert SEQ ID NO 111 before

AGACCACAGCAGAAATTCCAGCCAAG

Page 52, Table I insert SEQ ID NO 041 before PSA

Page 52, Table I insert SEQ ID NO 112 before

TGAAGCACTGAGCAGAAGCTGGA

Page 53, Table I insert SEQ ID NO 113 before

GAGGGTTGTCTGGAGGACTTCAA

Page 53, Table I insert SEQ ID NO 046 before PSGR

Page 53, Table I insert SEQ ID NO 114 before

ACACCGCTTTGGAAACAGCCTTCATC

Page 53, Table I insert SEQ ID NO 115 before

GTA CTGATGTGCTTATGGGCAACTGG

Page 53, Table I insert SEQ ID NO 042 before PSM

Page 53, Table I insert SEQ ID NO 116 before

AGTTCAGTGAGAGACTCCAGGAC

Page 53, Table I insert SEQ ID NO 117 before

CTGCACTGTGAAGGCTGCAACAT

Page 53, Table I insert SEQ ID NO 048 before TERT

Page 53, Table I insert SEQ ID NO 118 before

AGCACACCTGCCGTCTTCACTT

Page 53, Table I insert SEQ ID NO 119 before

GGCACACCTTTGGTCACTCCAA

Page 53, Table I insert SEQ ID NO 049 before Timp1

Page 53, Table I insert SEQ ID NO 120 before

CCAAGACCTACACTGTTGGCTGT

Page 53, Table I insert SEQ ID NO 121 before

ACTGTGCAGGCTTCAGTTCCACT

Page 53, Table I insert SEQ ID NO 050 before **Timp2**

Page 53, Table I insert SEQ ID NO 122 before

TGGGCTGCGAGTGCAAGATCAC

Page 53, Table I insert SEQ ID NO 123 before

CTGCTTATGGGTCCTCGATGTC

Page 53, Table I insert SEQ ID NO 051 before **Topo2a**

Page 53, Table I insert SEQ ID NO 124 before

GCCATCCACTTCTGATGATTCTG

Page 53, Table I insert SEQ ID NO 125 before

ACCAGTCTTGGGCTTGGTAAGA

Page 53, Table I insert SEQ ID NO 052 before **Topo2b**

Page 53, Table I insert SEQ ID NO 126 before

AAGCCCAAGAGAGCCCCAAAAC

Page 53, Table I insert SEQ ID NO 127 before

TGGCAGAGAAGGTGGCTCAGTA

Page 53, Table I insert SEQ ID NO 053 before **TROP2**

Page 53, Table I insert SEQ ID NO 128 before

TGTTGCTACTCTGGTGTGTCCCAAG

Page 53, Table I insert SEQ ID NO 129 before

CTGGGATTCAAAGGAGGTACAGCTC

Page 53, Table I insert SEQ ID NO 056 before **uPA**

Page 53, Table I insert SEQ ID NO 130 before

TGGGCTGTGAGTGTAAGTGTGAG

Page 53, Table I insert SEQ ID NO 131 before

CACCCAGTGAGGATTGGATGAAC

Page 54, line 7 insert SEQ ID NO 014 before **CK19**

Page 54, line 8 insert SEQ ID NO 014 before **CK19**

Page 54, line 9 insert SEQ ID NO 014 before **CK19** and SEQ ID NO 010 before

CK5 and SEQ ID NO 053 before **TROP2**

Page 54, line 12 insert SEQ ID NO 020 before **EpCAM** and SEQ ID NO 039 before **Muc-1** and SEQ ID NO 030 before **Mic-1**

Page 54, line 15 insert SEQ ID NO 014 before **CK19** and SEQ ID NO 020 before **EpCAM** and SEQ ID NO 039 before **Muc-1**

Page 54, line 1 insert SEQ ID NO 014 before **CK19**

Page 54, line 2 insert SEQ ID NO 014 before **CK19**

Page 54, line 3 insert SEQ ID NO 014 before **CK19**

Page 54, line 8 insert SEQ ID NO 014 before **CK19**

Page 54, line 14 insert SEQ ID NO 041 before **PSA** and SEQ ID NO 042 before **PSM** and SEQ ID NO 002 before **AR** and SEQ ID NO 025 before **HPN** and SEQ ID NO 014 before **CK19**

Page 54, line 15 insert SEQ ID NO 020 before **EpCAM**

Page 54, line 24 insert SEQ ID NO 041 before **PSA** and SEQ ID NO 042 before **PSM** and SEQ ID NO 031 before **MGB1**

Page 54, line 25 insert SEQ ID NO 032 before **MGB2** and SEQ ID NO 044 before **PIP** and SEQ ID NO 011 before **CK 8** and SEQ ID NO 014 before **CK 19** and SEQ ID NO 020 before **EpCAM**

Page 57, line 6 insert SEQ ID NO 041 before **PSA** and SEQ ID NO 042 before **PSM** and SEQ ID NO 026 before **HK2** and SEQ ID NO 025 before **HPN**

Page 57, line 7 insert SEQ ID NO 046 before **PSGR** and SEQ ID NO 016 before **DD3** and SEQ ID NO 031 before **MGB1** and SEQ ID NO 032 before **MGB2**

Page 57, line 8 insert SEQ ID NO 025 before **HPN**

Page 57, line 9 insert SEQ ID NO 041 before **PSA**

Page 57, line 10 insert SEQ ID NO 042 before **PSM** and SEQ ID NO 025 before **HPN** and SEQ ID NO 029 before **hK2** and SEQ ID NO 046 before **PSGR**

Page 57, line 11 insert SEQ ID NO 016 before **DD3** and SEQ ID NO 031 before **mamaglobin 1** and SEQ ID NO 032 before **mamaglobin 2**

Page 57, line 12 insert SEQ ID NO 031 before **MBG1** and SEQ ID NO 032 before **MBG2**

Page 57, line 13 insert SEQ ID NO 041 before **PSA** and SEQ ID NO 042 before **PSM**

Page 57, line 14 insert SEQ ID NO 025 before **HPN**

Page 57, line 15 insert SEQ ID NO 025 before **Hepsin** and SEQ ID NO 042
before **PSM**

Page 57, line 20 insert SEQ ID NO 002 before **AR** and SEQ ID NO 037 before
NKX3A and SEQ ID NO 019 before **EGFR** and SEQ ID NO 021 and SEQ ID
NO 022 before **ER** and SEQ ID NO 036 before **MDR1** and SEQ ID NO 035
before **MRP**

Page 57, line 21 insert SEQ ID NO 051 before **Topo2a**

Page 57, line 22 insert SEQ ID NO 002 before **AR** and SEQ ID NO 037 before
NKX3A

Page 57, line 23 insert SEQ ID NO 051 before **Topo2a** Page 65, line 26 insert
SEQ ID NO 036 before **MDR1** and SEQ ID NO 019 before **EGFR** and SEQ ID
NO 021 and SEQ ID NO 022 before **ER**

Page 57, line 24 insert SEQ ID NO 036 before **MDR1** and SEQ ID NO 035
before **MRP**

Page 58, line 1 insert SEQ ID NO 036 before **MDR1**

Page 58, line 2 insert SEQ ID NO 002 before **AR**

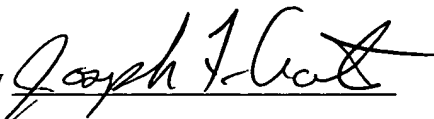
Page 58, line 3 insert SEQ ID NO 036 before **MDR1**

Page 58, line 4 insert SEQ ID NO 002 before **AR**

Page 58, line 6 insert SEQ ID NO 002 before **AR**

Page 58, line 7 insert SEQ ID NO 025 before **Hepsin**

Respectfully submitted,

By 

Joseph F. Aceto, Ph.D., J.D.

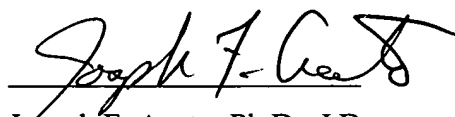
PTO Registration No. 50,701

Telephone No. 215-830-0777, x237

Statement of Sequence Listing Information

I hereby state that the information recorded in computer readable form is identical to the written (compact disc) sequence listing included.

I further hereby state that this submission, filed in accordance with 37 CFR 1.821(g), herein does not include new matter or matter which goes beyond the disclosure in the international application.

A handwritten signature in black ink, appearing to read "Joseph F. Aceto", written over a horizontal line.

Joseph F. Aceto, Ph.D., J.D.

PTO Registration No. 50,701